BILL NO. S-78-03-13

SPECIAL ORDINANCE NO. S-47-78

AN ORDINANCE approving Change Order No. 19 in connection with Water Pollution Control Plant Addition, Division I.

BE IT ORDAINED BY THE COMMON COUNCIL OF THE CITY OF FORT WAYNE, INDIANA:

SECTION 1. That Change Order No. 19 to Hagerman-Shambaugh, in connection with Water Pollution Control Plant Addition, Division I, for modification of Stormwater Lift Station facility:

Install Enclosed Dry Type 112-½KVA, 4160/480 Volt, 3 Phase, 3 Wire Transformer; Two 15A/3P Circuit Breakers, One 150A/3P Circuit Breaker, Six Size (1) Starters, One FVNR Size (2) Starter, One Pump Alternator and One 175A/3P Main Circuit Breaker, Installation of Motor Control Center: Relocate Resistor Banks, with Four Concrete Protective Posts, Installation of Two Stormwater Pumps and accompanying Water Seal and Water Lubrication Syster with necessary labor and materials for wiring accompanying above Project,

in the amount of $50,520.95, as set out in the specifications, is hereby in all things ratified, confirmed and approved.

SECTION 2. This Ordinance shall be in full force and effect from and after its passage and approval by the Mayor.

Councilman

APPROVED AS TO FORM AND LEGALITY.

Read the first time in full and on motion by Burns, seconded by Hinga, and duly adopted, read the second time by title and referred to the Committee on City Utilities (and the City Plan Commission for recommendation) and Public Hearing to be held after due legal notice, at the Council Chambers, City-County Building, Fort Wayne, Indiana, on _____, the _____ day of _____, 19__, at _____ o'clock _____ M., E.S.T.

DATE: 3-14-78

Charles W. Westerman
CITY CLERK

Read the third time in full and on motion by Burns, seconded by Hinga, and duly adopted, placed on its passage.

PASSED (LOST) by the following vote:

	AYES	NAYS	ABSTAINED	ABSENT	TO-WIT:
TOTAL VOTES	8	0		1	
BURNS	X				
HINGA	X				
HUNTER				X	
MOSES	X				
NUCKOLS	X				
SCHMIDT, D.	X				
SCHMIDT, V.	X				
STIER	X				
TALARICO	X				

DATE: 3/28/78

Charles W. Westerman
CITY CLERK

Passed and adopted by the Common Council of the City of Fort Wayne, Indiana, as ~~(ZONING MAP)~~ ~~(GENERAL)~~ (ANNEXATION) (SPECIAL) (~~APPROPRIATION~~) ORDINANCE (~~RESOLUTION~~) No. S-47-78 on the 28th day of March, 19 78.

ATTEST: (SEAL)

Charles W. Westerman
CITY CLERK

Samuel J. Talarico
PRESIDING OFFICER

Presented by me to the Mayor of the City of Fort Wayne, Indiana, on the 29th day of March, 19 78 at the hour of 3 o'clock P M., E.S.T.

Charles W. Westerman
CITY CLERK

Approved and signed by me this 30th day of March, 19 78 at the hour of 3 o'clock _____ M., E.S.T.

Robert Armstrong
MAYOR

Bill No. S-78-03-13

REPORT OF THE COMMITTEE ON CITY UTILITIES

We, your Committee on City Utilities to whom was referred an Ordinance approving Change Order No. 19 in connection with Water Pollution Control Plant Addition, Division I

have had said Ordinance under consideration and beg leave to report back to the Common Council that said Ordinance DO PASS.

PAUL M. BURNS - CHAIRMAN

JAMES S. STIER - VICE CHAIRMAN

VIVIAN G. SCHMIDT

WINFIELD C. MOSES, JR.

FREDRICK R. HUNTER

3-28-78
DATE

CONCURRED IN
CHARLES W.

Memorandum

To Howard Biggs Date 2-10-78

From Neil Wisler

Subject WPC Plant Expansion - Division I

COPIES TO:

Paul Brunner
Ed Stanczak
Ron Pitzer

Enclosed is change order #19 for additional work on Division I.

We have reviewed this change order and it has been signed by the contractor and engineer.

We are submitting to you for your approval, prior to transmitting to the Board of Works.

Neil Wisler

Neil Wisler
Programs Manager
Water Pollution Control Plant

NW/gw

Enclosure

65-243-11 2/23/78
Council 3/14/78

SK
R.L.P.
2/22/78

65-243-11 2/23/78 Job No. 3263.8D

PROJECT WATER QUALITY CONTROL PROJECT OWNER CITY OF FORT WAYNE, INDIANA

DIVISION/SECTION I - Water Pollution Control Plant Additions

CHANGE ORDER NO. 19

TO: Hagerman-Shambaugh - Joint Bidders
c/o Hagerman Construction Corporation
403 Strauss Building
P. O. Box 690
Fort Wayne, Indiana 46801

You are hereby authorized to make the following additions and/or deductions to your contract amount.

	Previous Contract Amount	Increase	Decrease	Net Change (Deduct)(Add)	Revised Contract Amount
TOTAL	$ 21,824,290.67	$ 55,164.92	$ 4,643.97	$ 50,520.95	$ 21,874,811.62

Description of Change:	Add	Deduct
STORMWATER LIFT STATION FACILITY CHANGES		
Item No. 1		
Delete the furnishing and installation of a new pump alternator in the existing motor control center. Following is the breakdown of the costs:		
Material		$ 475.00
Labor		21.71
Subcontractor Overhead & Profit		99.34
Item No. 2		
Delete the wiring from the existing motor control center to two (2) Type E-2, 3/4 HP exhaust fans. Following is the breakdown of the costs:		
Material		$ 105.79
Labor		767.48
Subcontractor Overhead & Profit		174.65

Description of Change:	Add	Deduct
Item No. 3		
Furnish all labor and materials necessary to install an enclosed dry type 112-1/2 KVA, 4160/480 volt, 3 phase, 3 wire transformer, including all 5 KV cable feeder connections as required. Following is the breakdown of the costs:		
Material	$5,454.55	
Labor	393.84	
Subcontractor Overhead & Profit	1,169.68	
Item No. 4		
Furnish all labor and materials necessary to install a motor control center consisting of two (2) 90" x 20" x 20" cubicles, two (2) 15A/3P circuit breakers, one (1) 150A/3P circuit breaker, six (6) FVNR Size 1 starters, one (1) FVNR Size 2 starter, and one (1) pump alternator and one (1) 175A/3P main circuit breaker. Following is the breakdown of the costs:		
Material	$5,750.00	
Labor	1,483.97	
Subcontractor Overhead & Profit	1,446.79	
Item No. 5		
Furnish all labor and materials necessary to install a weatherproof NEMA 3R enclosure and a 12' x 5' x 8" reinforced concrete base for each of the two (2) resistor banks serving the 1,500 HP, 4,160 volt stormwater pumps. Following is the breakdown of the costs:		
Material	$3,062.75	
Labor	1,018.38	
Subcontractors Overhead & Profit	816.23	

Description of Change:	Add	Deduct
Item No. 6		
Furnish, install and wire complete for the two (2) 1,500 HP stormwater pumps, six (6) thermally actuated flow switches associated with the water seal system as shown on Drawing E34A. Following is the breakdown of the costs:		
Material	$4,241.28	
Labor	1,543.44	
Subcontractor Overhead & Profit	1,156.94	
Item No. 7		
Furnish all labor and materials necessary to relocate the resistor banks associated with the two (2) 1,500 HP, 4,160 volt, 3 phase stormwater pumps from the location inside the Stormwater Lift Station Building to a concrete pad just outside the building. Following is the breakdown of the costs:		
Material	$6,724.46	
Labor	6,162.99	
Subcontractor Overhead & Profit	2,577.49	
Item No. 8		
Furnish all labor and materials necessary to provide and install branch circuit wiring and heating cables for the water pipe riser located in the northeast corner of the Stormwater Lift Station. Following is a breakdown of the costs:		
Material	$ 520.70	
Labor	1,486.25	
Subcontractor Overhead & Profit	401.39	

Description of Change:	Add	Deduct
Item No. 9		
Furnish, install and wire for each of the two (2) 7-1/2 HP exhaust fans (E-1 and E-1A), single stage, reverse acting thermostats as shown on Drawing E34A. Following is a breakdown of the costs:		
Material	$ 172.05	
Labor	1,020.66	
Subcontractor Overhead & Profit	238.54	
Subtotals Items 1 through 9	$46,842.38	$1,643.97
NET CHANGE - ELECTRICAL (ADD)	$45,198.41	
Item No. 10		
Furnish all labor and materials necessary to insulate the potable water supply pipe after the electrical heating cable has been installed as per Item No. 8 of this change order. Following is a breakdown of the costs:		
Labor and Material	$ 315.00	
Subcontractor Overhead & Profit	47.25	
Item No. 11		
Furnish all labor and materials necessary to install a water seal and water lubrication piping system for the stormwater pumps as shown on attached schematic drawing. The required additional labor and materials are as follows:		
Material: Piping	$ 648.00	
Valves	122.00	
Labor	1,838.00	
Subcontractor Overhead & Profit	391.00	
Subtotals	$3,361.25	$ 0.00
NET CHANGE - ITEMS 10 AND 11-MECHANICAL (ADD)	$ 3,361.25	

PROJECT WATER QUALITY CONTROL PROJECT Job No. 3263.8D

CHANGE ORDER NO. 19

Description of Change:

Item No. 12

Furnish all labor and materials necessary to install four (4) concrete filled 6" diameter by 8-foot long protective steel posts for mechanical protection of the resistor banks; repair the sheet metal building wall where the existing louver is being removed adjacent to the resistor banks; paint additional piping and conduit work; and delete the floor supports and plates for the resistor banks. Following is a breakdown of the costs:

	Add	Deduct
Material and Labor:		
Protective Posts	$ 500.00	
Wall Repair	100.00	
Painting	460.00	
Deletion of Floor Supports		$3,000.00
Sub-Contractor Overhead & Profit	159.00	
Subtotal Item No. 12	$1,219.00	$3,000.00
Total All Items	$51,422.63	$4,643.97
TOTAL NET CHANGE (ADD)		$46,778.66
Contractor Overhead & Profit		3,742.29
TOTAL NET CHANGE		$50,520.95

PROJECT WATER QUALITY CONTROL PROJECT Job. No. 3263.8D

CHANGE ORDER NO. 19

PAGE -6-

Description of Change: Add Deduct

The time necessary for the execution of changes required in this change order is 20 calendar days. However, this work shall be accomplished concurrently with the time allowed or provided for under Change Order No. 18; therefore, no job management costs of the electrical subcontractor are included in this change order.

It is also recognized that this change order does not include any changes to the process control and computer system, and no costs associated with the process control and computer system or costs flowing from these items have been included.

RECOMMENDED:

HOWARD NEEDLES TAMMEN & BERGNEDOFF
HENRY B. STEEG & ASSOCIATES DIVISION

By Larry H. Vocher
Project
Title Engineer Date 1/31/78

ACCEPTED:

HAGERMAN-SHAMBAUGH, Joint Bidders
ACCEPTED FOR HAGERMAN CONSTRUCTION CORP.
CONTRACTOR

By Mark F. Hagerman
Title Vice Pres. Date 2/8/78

ACCEPTED FOR SHAMBAUGH & SON, INC.
CONTRACTOR

By
Title Secy Date 2/8/78

APPROVED:

CITY OF FORT WAYNE, INDIANA
OWNER

By Henry P. Wehrenberg
Henry P. Wehrenberg, Chairman

Ethel H. LaMar
Ethel H. LaMar, Member

Max Scott
Max Scott, Member

Title BOARD OF PUBLIC WORKS

Date 2/23/78

Change Order No. 19

Item No. 1

Board Order No. _____

REQUEST AND JUST'FICATION FOR CHANGE

1. Necessity for change: The necessity of a new motor control center as outlined in Item No. 4 of this change order negated the need for an alternator in the existing motor control center.

2. Will proposed change alter size of the project? Yes X No _____

If yes, explain

Material and labor deleted from project.

3. Affect on operation and maintenance cost of this project:

N/A

_____

Engineer

Item No. 2

Change Order No. 19

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The relocation of the resistor banks associated with the 1,500 HP pump motor from inside the Stormwater Lift Station Building to concrete pads located outside the building eliminates the need for the two (2) Type E-2, roof exhaust fans, thus there is no need to provide branch circuit wiring to the fan motors. The fans were deleted under Item No. 7, C.O. 17.

2. Will proposed change alter size of the project? Yes X No _____

   If yes, explain

   Material and labor deleted from project.

3. Affect on operation and maintenance cost of this project:

   N/A

_____

Engineer

Item No. 3

Change Order No. 19

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: This new 112-1/2 KVA, 4160/480 volt, 3 phase transformer is necessary to reduce the primary voltage to 480 volts for service to the newly established motor control center.

2. Will proposed change alter size of the project? Yes X No _____

If yes, explain

Addition of labor and material.

3. Affect on operation and maintenance cost of this project:

N/A

_____

Engineer

Item No. 4

Change Order No. 19

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The existing motor control center did not have adequate space or capacity to receive the required number of starters for the new motors, thus it was necessary to establish a new motor control center.

2. Will proposed change alter size of the project? Yes X No _____

If yes, explain

Addition of labor and material.

3. Affect on operation and maintenance cost of this project:

N/A

_____

Engineer

Item No. 5

Change Order No. 19

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: Space limitations within the Stormwater Lift Station Building and the excessive amount of heat produced by the resistor banks associated with the 1,500 HP pump motor necessitate that the resistor banks be relocated outside of the building and enclosed in rainproof NEMA 3R enclosures.

2. Will proposed change alter size of the project? Yes X No _____

   If yes, explain

   Additional labor and material will be required.

3. Affect on operation and maintenance cost of this project:

   N/A

_____

Engineer

Change Order No. 19

Items No. 6 and 11

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The addition of six (6) new flow switches and appurtenant piping work as shown on the attached sketch is required to protect the new stormwater pumps from overheating if the cooling water should stop flowing due to the line plugging or water seal pump failure. Each of the two new stormwater pumps being furnished has three connections requiring clean, fresh water for bearing lubrication, motor cooling and water seal. The manufacturer recommends that each point of connection of the fresh water supply should have a flow switch installed to stop the stormwater pumps from running if no water is being supplied to any point.

2. Will proposed change alter size of the project? Yes X No _____

   If yes, explain

   Additional material and labor will be required.

3. Affect on operation and maintenance cost of this project:

   N/A

_____

Engineer

Change Order No. 19

Item No. 7

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The necessity of locating the resistor banks outside of the Stormwater Station Building as outlined in Item No. 5 of this change order requires additional lengths of 1 KV and 5 KV cables between the resistor banks, cam switches and the two (2) 1,500 HP pump motors.

2. Will proposed change alter size of the project? Yes X No _____

   If yes, explain

   Additional material and labor will be required.

3. Affect on operation and maintenance cost of this project:

   N/A

_____

Engineer

Change Order No. 19

Items No. 8 and 10

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The proximity of the existing potable water service piping to the newly installed fresh air louver requires that this pipe be wrapped with heating tape, controlled by a thermostat, in order to prevent freezing of the pipe during extremely cold weather.

2. Will proposed change alter size of the project? Yes X No _____

If yes, explain

Additional material and labor will be required.

3. Affect on operation and maintenance cost of this project:

N/A

_____

Engineer

Change Order No. 19

Item No. 9

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The contractural drawings did not indicate the number and type of thermostats required for control of the two (2) Type E-1, 7-1/2 HP exhaust fans. The required thermostats for each of the exhaust fans shall be reverse-acting, wall-mounted type located as shown on Drawing E34A dated 2/25/77.

2. Will proposed change alter size of the project? Yes X No _____

   If yes, explain

   Additional material and labor will be required.

3. Affect on operation and maintenance cost of this project:

   N/A

_____

Engineer

Item No. 12

Change Order No. 19

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The addition of four (4) new protective steel posts around the new resistor banks is necessary to prevent possible damage occurring to the resistor banks by vehicle traffic. The resistor banks are located in a vehicle parking area and beside the access drive to the stormwater station trash rack.

   The deletion of the structural steel supports and plates is due to the relocation of the resistor banks from inside of the Stormwater Building to the outside. This change eliminates the necessity of the steel supports within the building because they were designed to support the resistor banks.

2. Will proposed change alter size of the project? Yes X No _____

   If yes, explain

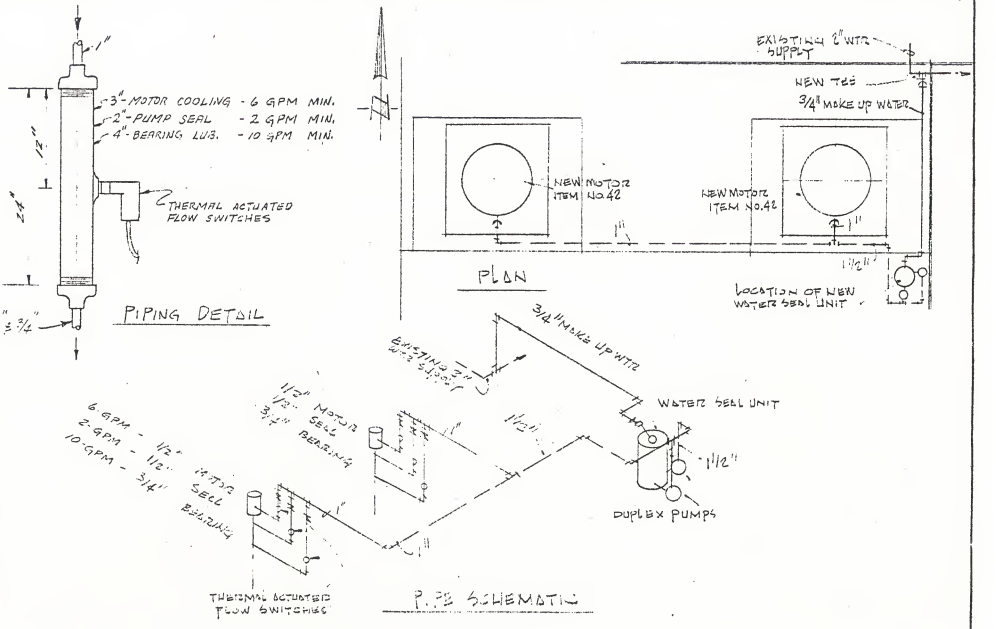
   Additional material and labor will be required.

3. Affect on operation and maintenance cost of this project:

   N/A

_____

Engineer



HENRY B. STEEG & ASSOCIATES
A DIVISION OF HOWARD NEEDLES TAMMEN & BERGENDOFF
ENGINEERS
INDIANAPOLIS, INDIANA

WATER SEAL PIPING - WATER POLLUTION CONTROL PLANT
DIV. E. FORT WAYNE INDIANA.

3985

CHANGE ORDER NO. 19

TITLE OF ORDINANCE SPECIAL ORDINANCE - WATER QUALITY CONTROL PROJ., WATER POLLUTION CONTROL PLANT ADDITION, DIVISION I

DEPARTMENT REQUESTING ORDINANCE BOARD OF PUBLIC WORKS d-78-03-13

SYNOPSIS OF ORDINANCE CHANGE ORDER NO. 19 - WPC PLANT ADD., DIV. I
MODIFICATION OF STORMWATER LIFT STATION FACILITY: INSTALL ENCLOSED DRY TYPE 112-$\frac{1}{2}$KVA, 4160/480 VOLT, 3 PHASE, 3 WIRE TRANSFORMER; TWO 15A/3P CIRCUIT BREAKERS, ONE 150A/3P CIRCUIT BREAKER, SIX SIZE (1) STARTERS, ONE FVNR SIZE (2) STARTER, ONE PUMP ALTERNATOR AND ONE 175A/3P MAIN CIRCUIT BREAKER, INSTALLATION OF MOTOR CONTROL CENTER: RELOCATE RESISTOR BANKS, WITH FOUR CONCRETE PROTECTIVE POSTS, INSTALLATION OF TWO STORMWATER PUMPS AND ACCOMPANYING WATER SEAL AND WATER LUBRICATION SYSTEM WITH NECESSARY LABOR AND MATERIALS FOR WIRING ACCOMPANYING ABOVE PROJECT.

(CHANGE ORDER NO. 19 WITH MEMORANDUM ATTACHED)

REVISED CONTRACT AMOUNT INCLUDING THIS CHANGE IS $21,874,811.62

EFFECT OF PASSAGE ADDITION OF NEW ELECTRICAL EQUIPMENT, SWITCHES AND APPURTENANT PIPING TO PROTECT PUMPS FROM OVERHEATING AND RELOCATION OF VARIOUS RESISTOR BANKS TO PREVENT OVERHEATING

EFFECT OF NON-PASSAGE INABILITY TO MODIFY NEW MOTOR CONTROL CENTER.

MONEY INVOLVED (DIRECT COSTS, EXPENDITURES, SAVINGS) $50,520.95 FROM FEDERAL FUNDS

ASSIGNED TO COMMITTEE

EP

Cityfacilities